REMARKS/ARGUMENTS

Claims 1-5, 9-14, 19-20, 55-72, 75 and 80-123 were pending before the present amendment and all claims, except Claims 121-123, have been canceled. For the convenience of the Examiner, Applicant presents herewith a new claim set rather than amend some of the existing claims and alter the dependencies. After entrance of the above claim amendments, only Claims 121-157 are now pending. Note that new Claims 124-157 depend from Claims 121-123. The dependent claims find descriptive support in the prior claim set and throughout the Specification. Applicant will address below any specific written description rejections of the previously pending claims as they relate to the language of the new claim set.

It should be noted that Applicant reserves the right to file subsequent applications to any canceled or amended subject matter and such cancellation or amendment should not be viewed as an admission of the correctness of the Office's position or as an abandonment of the subject matter. For the sake of completeness, Applicant incorporates herein each of her prior arguments and evidence as presented in the previous responses.

Applicant appreciates the Examiner's prior acknowledgment that the present Office Action is a non-final, as was discussed with Applicant's prior counsel on March 25, 2003 and as verified in writing on March 26, 2003.

Rejection of Claims 121-123 under 35 USC 112, first paragraph

Claims 121-123 have been rejected under 35 USC 112, first paragraph, as a new grounds of rejection, allegedly due to the addition of new matter not described in the Specification. (See Paragraph 13 on page 8 of the Office Action.) Applicant respectfully traverses.

As the basis of the rejection, the Office has focused on the language "antagonist induces endothelial cell apoptosis and interferes with specific binding of the $\alpha 5\beta 1$ integrin". Support for the first half of the conjunction is found on page 16, lines 25-28, wherein the Specification teaches that "$\alpha 5\beta 1$ antagonists also induce apoptosis of growth factor stimulated endothelial cells *in vitro* and *in vivo*." The second half of the conjunction is supported by original Claim 1 which stated: "interferes with specific binding of the $\alpha 5\beta 1$ integrin" and page 5, lines 9-10 of the

Specification. For these reasons, Applicant submits that the cited language in Claims 121-123 is properly described and the rejection under 35 USC 112, first paragraph, should be withdrawn.

Applicant notes that this is the only rejection in the Office Action that pertains to Claims 121-123 and, as a result, these claims should be considered allowable, since the rejection has been overcome. All remaining claims are dependent upon Claims 121-123.

Rejection under 35 USC 112, second paragraph

Claim 2 had been rejected as indefinite due to the word "substantially". Although Applicant respectfully traverses this rejection and points out that the term "substantially" has been utilized in issued biotechnology claims for a number of years and is not considered indefinite, in order to advance prosecution, Applicant has canceled Claim 2 and does not use the term in the remaining claims.

Rejections under 35 USC 112, first paragraph (written description)

Claims 80-86, 90-96 and 110-116 have been rejected under 35 USC 112, first paragraph, for allegedly lacking adequate written description. Although Applicant has canceled these specific claims, the rejected language "the limitation of an antagonist wherein binding of said agent to $\alpha 5\beta 1$ integrin is at least two-fold, five-fold, or ten-fold greater than the binding of said antagonist to an integrin other than $\alpha 5\beta 1$" is used in Claims 152-157, but has been modified to read as follows: "wherein the antagonist is a peptide and wherein the binding of said peptide to said $\alpha 5\beta 1$ integrin is at least a two-fold, five-fold or ten-fold greater specificity than the binding of said peptide to an integrin other than $\alpha 5\beta 1$." Applicant respectfully points out that the Specification fully describes this amended claim language, both in the prior claims and the text. See page 23, lines 5-14, which reads as follows:

> "As discussed for anti-$\alpha 5\beta 1$ antibodies, a peptide that specifically binds $\alpha 5\beta 1$ can be useful in a method of the invention where the antibody [sic? should be peptide?] binds to $\alpha 5\beta 1$ with at least about a two-fold greater specificity than it binds to another integrin, for example, $\alpha V\beta 3$, is more useful if it has at least about

a five-fold greater specificity for $\alpha 5\beta 1$, and is particularly useful if it has at least about a one order of magnitude greater specificity for $\alpha 5\beta 1$ than for an integrin such as $\alpha V\beta 3$."

With the language in the Specification, Applicant has described the use of peptides. Therefore, any rejection of these now pending claims under the written description requirement is improper and should be withdrawn.

Claims 86, 96, and 116 were rejected under 35 USC 112, first paragraph, due to alleged lack of written description for "an agent which does not interfere with the specific binding of a ligand to any integrin" since the support is only drawn to fold-affinity. Applicant respectfully disagrees, but has deleted such language from the pending claims. Accordingly, it is respectfully requested that this particular rejection be withdrawn as moot.

Rejection under 35 USC 112, first paragraph (enablement)

Claims 80-120 were rejected under 35 USC 112, first paragraph, for allegedly not being enabled for an agent that binds two, five or ten-fold greater to $\alpha 5\beta 1$ than any other integrin. Applicant has canceled these claims by the present amendment and thus has rendered this rejection moot. Further, the pending claims (Claims 152-157) that define greater specificity now recite peptides and antibodies as the specific types of antagonists utilized. For these and reasons argued previously, Applicant respectfully submits that Claims 152-157 are enabled for these purposes.

Rejections under 35 USC 102(e)

The rejection of Claims 1-5, 9-13, 55-66, 68-69, 71-72, 75 and 80-120 under 35 USC 102(e) as being anticipated by US Patent 5,922,676 (Pasqualini); the rejection of Claims 1-3, 9-13, 55, 57-63, 65-66, 71-72, 75, 80-97, 100-106, 108-117, and 119-120 under 35 USC 102(e) as being anticipated by Pasqualini as evidenced by PCT Application WO 95/14714 (Ruoslahti), and the rejection of Claims 80-106, 108-117, and 119-120 under 35 USC 102(e) as being anticipated by Pasqualini as evidenced by Ruoslahti and Pytela et al., Cell 1985, 40:191-198, have been rendered moot by the cancellation of all of these claims. Claims 121-123 remain as the

independent claims and Claims 124-157 depend therefrom. For these reasons and others, Applicant asserts that Claims 121-157 should be allowable over these cited references.

Rejections under 35 USC 103

Claims 1-5, 9-13, 19-20, 55-72, 75, 80-106, 108-117 and 119-120 were rejected under 35 USC 103 as obvious over Pasqualini as evidenced by Ruoslahti, Thorpe (Monoclonal Antibodies in Biological and Clinical Applications, Pinchera et al. eds, 475-506 (1985)), and Pytela. Since these claims have been canceled, the rejection is rendered moot. Claims 1-5, 9-14, 19-20, 55-72, 75, and 80-120 were rejected as obvious over Pasqualini in view of Ruoslahti. Again, since these claims have been canceled, the rejection is rendered moot.

CONCLUSION

In view of the foregoing, Applicant believes that all claims now pending in this Application are in condition for allowance and an action to that end is respectfully requested.

If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at 858-350-6108 in San Diego, but use the San Francisco address for written correspondence.

Respectfully submitted,

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